## Access to Microfinance & Improved Implementation of Policy Reform (AMIR Program)

Funded By U.S. Agency for International Development

# Creating a New ICT Spirit in Jordan through Education

Final Report

Deliverable for POL Component, Task No. 4.6.20 Contract No. 278-C-00-98-00029-00 This report was prepared by Cathryn Goddard in collaboration with Chemonics International Inc., prime contractor to the U.S. Agency for International Development for the AMIR Program in Jordan.

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## **Executive Summary**

Field General Directors from the Ministry of Education met April 19-21, 2001, at the Mercure Hotel in Ma'een, to discuss "Creating a New Information and Communication Technology (ICT) Spirit in Jordan through Education." Using the state-of-the-art team building and planning techniques used by some of the worlds largest multinational firms, participants worked long hours brainstorming and discussing options.

Twenty-nine general directors from the field were joined by the Minister, the Secretary General, the General Director for ICT and the General Director for Training, as well as two representatives of universities), to cooperated to:

- Develop a shared vision of ICT in education in Jordan
- Produce action plans to carry out that vision
- Create a spirit of teamwork between key stakeholders

Thursday afternoon and Friday morning, participants focused on teambuilding and information sharing. Friday afternoon they developed a shared sense of direction and moved to action planning to carry out their vision. Saturday they consolidated action plans and developed strategies to strengthen the human network, by communicating the new ICT spirit and shared vision with others.

Teams expressed some skepticism and discomfort initially, but later achieved remarkable consensus as well as enthusiasm to carry out the plans.

After the opening session, His Excellency the Minister described His Majesty King Abdullah II's commitment to widespread use of ICT in education in order to make Jordan a regional hub for this growing sector. The Minister also clarified the emerging Ministry vision of an ICT-connected future where participants will play a key role.

Participants then focused initially on identifying their top two ICT priorities, along with at least five practical steps to address them. The next morning they looked out into the short-run future, to the situation in education in 2002 and identified anticipated resources, opportunities and constraints.

The Secretary General heard their reports, commended them, and gave them examples of how they can review some of their assumptions from his recent trip to China. Later they worked together on an action task designed to help them see how to work together more effectively, with rich lessons, especially because enhanced cooperation among field general directorates can save so much time and energy.

To bring alive the "face of the customer," participants heard from the key users of the education system: business people, teachers and students. Each of them spoke from the heart as to why is ICT important to Jordan and to them personally. Thursday evening, Reem Badran, General Director of the Jordan Investment Board spoke to them about what investors are looking for in the future Jordanian work force. Friday, teachers and students from nearby Madaba, spoke about their needs and vision of the future. Friday evening, Khaled Kilani, Deputy Chairman of INT@J, the Information Technology Association of Jordan, spoke about

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what employers want to hire in the future. Both Ms. Badran and Mr. Kilani, also spoke of their own experience of gradual, but sustained, development of computer networks in the workplace.

Friday afternoon, participants clarified their vision by describing their purposes, their responses to "Why introduce ICT into Jordanian education in your directorate?" Then they broke into teams to answer the question, "How can you introduce ICT more effectively?" while focusing on four broad areas:

- Infrastructure
- Financial
- Technical
- Management

Subsequently teams produced action plans on how to introduce ICT in education in order to carry out the vision:

- Human resources
- Awareness
- Infrastructure
- Financial resources

In addition they produced communication strategies for transferring the new ICT and the methods used in the workshop to other stakeholders in the human network:

- Field to community, with support from headquarters
- Other Jordanian stakeholders: Government, private sector and universities
- Field to schools, with support from headquarters
- Field to community, with support from headquarters
- International community

Plans are living documents, meant to be revised, as new information becomes available. Periodic review allows plans to stay reasonable and move smoothly through time and space, motivating those who carry them out. All participants agreed that the workshop was highly productive in creating a new ICT spirit between the various stakeholders.

This report documents the process of developing a shared vision and identifying steps to realize it. By presenting the participants' actual outputs, it affirms the value of their exceptionally creative contributions. Each reader may draw from the report different conclusions, but its words and pictures capture the exciting spirit of teamwork and cooperation experienced in the workshop.

A journey of a thousand miles begins with the first step. Naturally only sustained commitment can realize the hopes and aspirations of workshop participants. The memory of the enthusiastic participation experienced in the two days together should provide great encouragement to all team members as the journey continues.

## Acknowledgements

The Coverdale Organization has had the pleasure of facilitating the Ministry of Education's workshop for field directors, "Creating a New ICT Spirit in Jordan through Education." We would like to thank each member of the team for giving remarkable efforts in generating enthusiasm, good will, creative approaches, and, most important, commitment. Your diverse knowledge, skills, disciplines, experiences and personal interests represent vital resources to this team.

This is your report and we are proud to have facilitated your efforts. You chose to work together, giving wholehearted support, putting in long hours, to make this workshop a success. Each of you chose, individually and as a team, to look for shared purposes and demonstrate respect for each other in producing the contents of this document.

- Ahmed Hyasat
- Ahmed Al Khuli
- Ahmed Al Shayyab
- Ahmed Al Hawamdeh
- Fawaz Bataineh
- Mohamed Al Saiedeh
- Mohamed Al Attieh
- Mohamed Khalil
- Mohamed Rashed
- Moahmoud Al Soliebi
- Mahmoud Doudin
- Mashhour Fallah
- Hisham Al Atrash
- Naief Al Omoush
- Nawaf Kokazah
- Hisham Al Attrash
- Yousef Al Habashneh
- Ghazi Al Khreishah

- Tawfiq Jaber
- Ali Al Ayasrah
- Awad Najadat
- Attieh Friej
- Adnan Al Shaweesh
- Abdul Majeed Abu Snobar
- Abdul Latif Abu Taha
- Abdul Kareem Al Azzam
- Abdul Razaq Al Rabie
- Atef Al Dwiekat
- Aref Al Majali
- Sulieman Al Friejat
- Zaha El Din Obiedat
- Khaled Shaheen
- Khaled Waqfi
- Husni Daoud
- Harb Hussein
- Talal Al-Zu'bi
- H.E. Dr. Khaled Toukan

## **Government of Jordan and Jordanian Private Sector**

This report reflects the efforts of many Jordanians committed to using education to create a new ICT spirit in Jordan. The rich combination of private and public sector officials reflected the teamwork necessary to developing a shared vision, and more important, to taking steps to make it a reality.

In addition to the Ministry, representatives from the external stakeholders participated actively in achieving the shared purposes of the workshop.

- INTAJ (Information Technology Association of Jordan)
- Jordan Investment Board
- Princess Sumayya University
- Al-Hussein University
- Madaba School District Students and Teachers

Within the ministry many people contributed their hopes and vision to the workshop design. Not everyone can be physically present at a workshop, but many of their ideas are reflected in the outcomes. Support staff in the Ministry's touching eagerness to serve, from secretarial staff to drivers, to those who keep the meetings running by

providing tea, coffee and za'tar, represents fuel to any team. We thank all these indirect contributors for their input.

## **Sponsors**

The US Agency for International Development through its highly successful AMIR Program, provided full support to the workshop. Steve Wade, AMIR Program Director was out of the country during the workshop, we felt his moral support. Sometimes our most effective contribution is trusting that others can work most effectively without our own intervention. Jamal al-Jabari, USAID project officer participated from Friday evening, attending sessions and encouraging both discussion and the new ICT spirit. We appreciate his support and confidence.



#### **Special guests**

To bring alive the "face of the customer," participants heard from the key users of the education system: business people, teachers and students. Each of them spoke from the heart as to why is ICT important to Jordan and to them personally. Thursday evening, Reem Badran, General Director of the Jordan Investment Board spoke to them about what investors are looking for in the future Jordanian work force. Friday, teachers and students from nearby Madaba, spoke about their needs and vision of the future. Friday evening, Khaled Kilani, Deputy Chairman of INT@J, the Information Technology Association of Jordan, spoke about what employers want to hire in the future. Both Ms. Badran and Mr. Kilani, also spoke of their own experience of gradual, but sustained, development of computer networks in the workplace.

While all speakers emphasized the importance of ICT, they affirmed that the spirit of information and communication technology is not in the hardware, but in the critical thinking of people, reminding participants that the essential network is first and foremost a human one.

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Teachers and students from the Madaba School District also had the opportunity to address the audience about their needs and vision of the future.

Ms. Eva Karadsheh/ Al-Khansa' Secondary School for Girls Mr. Amjad Abu Al-Haj / Madaba Secondary School for Boys Sawsan Khalil Abu Nab Obaida Abdul Razzaq Breizat Soleiman Khaled Hamarneh Tareq Abu Sleih

Sometimes we are surprised at how observant and articulate children can be. Their plea for their own futures left a strong impression on all present. The commitment and understanding of teachers, too, reflected the country's awareness of how important ICT is for all Jordanians. We thank them for taking time from their holiday to address this group.

Guests from the last workshop held for General Directors from the Ministry also provided the vital link between the two essential pieces of the ministry, the field and the headquarters. Three General Directors, Abdul Kareem Al Azzam (Information and Communication Technology), Hisham Al-Atrash (Projects and Infrastructure), and Mohammed Rashed (Training), participated actively in the teams, demonstrating their commitment to this new ICT spirit. Two two additional guests from the last workshop, Dr. Ahmed Hiasat, Princess Sumayya University and Dr. Talal al-Zu'bi, Al-Hussein University, added to the richness of the discussion during the action planning.

Finally, an informed press contributes directly to shaping the future by sharing the message events of this kind. Ayman Barakat made arrangements for Arabic and English language journalists, as well as a television crew, to cover the workshop and allow other Jordanians to be better informed about the process of government.

We thank each of our guests for their special contributions.

## **Behind the scenes support**

In a workshop, we may only note those participants we see, but many people backstage are necessary for an event like this to succeed. Mohammed Bazbaz (Procurement and acting Secretary General during our preparation) supported our efforts and would have participated had an injury not prevented him. Reyad Al-Nawaiseh (Finance), attended preparatory sessions and lent moral support as did Janet Bermamet (Cultural and International Relations) and Maher Jweihan (Secretary General, Jordan National Commission for UNESCO). They gave freely of their time and energy to ensure the success of their colleagues from the field.

Ziad Sabayleh (Educational Activities) made a major contribution by recommending we produce this report in bilingual format. Although two languages complicate production tremendously, English language and computer skills are both vital to Jordan's future. This report provides all participants with essential vocabulary for their needs at the managerial level. Adults can learn languages easily if they set realistic targets and focus on gradual progress. Discussing even a page of this text in English with colleagues regularly, especially daily, could steadily increase speaking confidence and language skills, with tremendous potential impact for the Ministry and Jordan.

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From the front office, Adnan Freihat and Musa Abu-Rumman contributed daily, with critical efforts to facilitate the success of the workshop, making difficult arrangements seem simple. Bassam Tayih (Cultural and International Relations) coordinated the preworkshop meetings with field General Directors. Khitam Al-Utaibi (Translation Department) and Baha Tahbouh (Computer Department) cooperated to produce slides in English and Arabic (also a good source to practice English with!) of the Ministry's vision of the future, supported by input from Nelson Ireland from the Canadian International Development Agency.

The entire facilitation team contributed to logistics of the workshop, from drafting invitation letters to organizing the interview schedule that ensured participants knew what to expect from the first day. These efforts were in addition to their active participation in facilitation training and their normally busy workload.

During the workshop, the ministry provided equipment and staff to ensure the Arabic transcription, as well as copying.

- Nermin Ziad Al-Labadi
- Azizah Ahmed Al-Fararjeh
- Raja Ahmad Abdul- Hadi
- Khadra Sadiq Abdul-Lateef
- Sa'id Abbadi

Their good-natured support, as well as their commitment to speed as well as accuracy made our task easier.

From AMIR, Lina Arafat handled the complicated tasks of workshop logistics, as well as support to the facilitation training. Sameera Qadoura participated in pre-planning the workshop with the Ministry and gave her usual insightful input throughout preparations, ensuring smooth operations. Wafa' Qassis produced the name badges and place markers and Mona Dahdaleh entered them in the contact list. Khalid Shrouf, Ala' Aloul, Samir abu Zanoneh, Faraj abu Nufal worked to ensure the English-Arabic handouts and other supplies arrived to support the teams' endeavors. Many people in the AMIR office contributed directly to the success of the workshop, from support staff to drivers. In acknowledging their input, we strengthen the entire team.

Basma El Far, translated the participants' words from Arabic into English to allow others to share the workshop experience and make this report a workbook for practicing English. Zuhair Jwenat took digital pictures of the teams and participants together. Hassan Ayoub took the group pictures on the final day. The words and the pictures all contribute to keeping the new ICT spirit alive.

#### **Facilitation Team**

While Coverdale had the lead responsibility for designing and managing the workshop, success would not have been possible without a team effort on the part of all those people trained as facilitators. Four people worked as external facilitators.



Hala Taher Green Team
Kifah Al-Omari Yellow Team
Suheil Shaheen Blue Team
Mohammed Rjoub Red Team

In addition, three floating facilitators were responsible for special areas.

Baha Tahboub
 Mohammed Al-Ajlouni
 Naser Obaidat
 Computer Center Coordinator
 Training Coordinator
 Overall Time Coordinator

The art of facilitation is not in what you say, but rather how well you listen. The supportive attention of facilitators indirectly allowed four teams composed of people from diverse backgrounds to work to common purposes and common methods. Their listening and observation are what makes the smooth operation of the workshop possible, the adapting of the schedule and the tasks to suit participant needs. That gift we can give to any team we are a part of. We are grateful for their serving as beautiful models of the spirit of teamwork and cooperation. May they motivate each of us to do the same in our own teams!

From outside the Ministry, Mohammed Asfour, Jordan Investment Board, with previous experience in Coverdale workshops, contributed wherever necessary to edit the report and ensure the smooth flow of the workshop (charting, drafting task wordings, assisting special guests).

Participation in the facilitation team represents continuity and connection to earlier

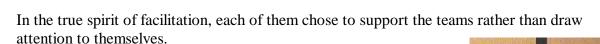
teams, as well as commitment to development Jordan's human resource potential.

Two critical members of the facilitation team deserve special mention.

• HE Dr. Khaled Toukan MOE

Minister

• Ghazi Al Khreishah MOE Secretary General



What enables and empowers outstanding performance is in fact an environment where people are willing to take risks together. Instilling that confidence is in the nature of leadership, providing the balance between keeping an eye on the long-term objectives, while rolling up sleeves to deal with immediate demands.

## **Report Preparation**

The tedious job of report preparation was a team effort, to which the transcribers' and translators' work was essential. Wafa' Qassis managed the report production process in Ma'een. Maram Naser met with her to provide a smooth transition from the last workshop and additional input after the initial draft. Mohammed Asfour edited the English and Arabic versions. Ayman Nimer provided computer support, especially regarding the photos. From the Ministry of Education, the facilitators, reviewed the draft report. They paid special attention to spelling of names, as well as taking time to make very specific, helpful comments.

Wafa' then prepared the draft and final versions in both languages including inserting pictures. The complexity of producing bilingual report is hard to imagine, but the results, in terms of potential usefulness to participants are worth it. Without Wafa's efforts this quality document could not have been achieved.

Many people helped to make the process efficient and pleasant. We are grateful to all who contributed. Hundreds of half sheets of paper thus lead to a vision. Those colorful bits of paper, when put together attractively, create an enduring memory to motivate each reader.

What is the purpose of a report like this? Is it the result of the workshop? No, hopefully the real result of the workshop is enhanced performance of the ICT Education Team. Like the photographs, however, the report is a reminder to us of what we accomplished together and an inspiration for future cooperation.

May the spirit of teamwork experienced during the workshop and its participatory, facilitated process serve as a model for the entire team to share with others as you pursue your shared objectives.

The real results of workshops like these depend on the commitment of every member of the team. If each person sustains the enthusiasm and cooperation demonstrated in the workshop, a very bright future is assured, not only for the participants and for the education sector, but also for Jordanians, and even the region, for generations to come.

## Overview: Workshop Preparation and Approach

## Clarifying the Vision of the Workshop

One of the critical steps in preparation for the workshop was to meet with top Ministry management to understand their vision of the workshop and agree on purposes.

- Develop a shared vision of the organization of the Ministry within Jordan's future information and communication technology environment
- Initiate a process of private-public sector dialogue to realize that vision
- Create a spirit of teamwork between key stakeholders.

Further purposes and results clarified the vision of the workshop:

- Exchange information between partners and help them to get to know each other better
- Produce a mini-action plan of steps to strengthen cooperation between stakeholders and begin to realize the vision
- Practice participatory methods in the workshop that team members can later apply at work.

## Anticipated results included:

- A spirit of teamwork
- Consensus among partners/stakeholders on the importance of cooperation
- Greater understanding of the resources each stakeholder represents
- Mini-action plans
- Commitment of participants to work together to carry out this plan.

These purposes and results, in turn, were reviewed and refined in discussions with each participant prior to the workshop itself, as well as criteria for determining workshop success. When we look at our individual aims or objectives (purposes, results and criteria), we soon discover our common aims. Despite diversity of opinion, a resource to any team, the initial vision provided the unity of purpose that drove the development of the workshop itself.

During interviews, participants also learned about the techniques and methods to be used in the workshop, so they would become more comfortable with them (alternation between general and team sessions, brainstorming, roles in a team, review).

## Agreeing on a Common Language

To ensure active participation the workshop was conducted in Arabic. Two reports, a bilingual report in Arabic and a report in English, reflect the different audiences. The bilingual version, including Arabic, the national language of Jordan, ensures the workshop will be shared with others within the ministry headquarters with the field and with the educational community, as well as helping all to increase their English skills. English is the international language of ICT, as well as the language of international donors. This report, in two versions, documents, for different audiences, the enthusiasm and commitment of participants.

For Jordanians, operating skillfully in the two languages is becoming an international necessity to stay abreast of changing technology and ensure their own development. As more bilingual documentation like this report becomes available, as more people use both languages in the workplace, bilingualism can be one of the renewable national resources Jordan becomes famous for, a major attraction to international investors.

## **Developing the Facilitation Team**

When a workshop uses techniques people may not be used to, facilitators can help to manage the process of change. Although participants were asked to facilitate their own team tasks, external facilitators make the smooth operation of the workshop possible by adapting the schedule and the tasks to suit participant comments and needs. In addition, after the workshop is over, these facilitators can be very useful to the Ministry and to the ICT Education Team in managing a process of teamwork and cooperation to deal with change.

To develop this team for the first workshop, the workshop director and members of the AMIR program trained selected MOE staff in ITC "Early Input from Logistics Team" participatory methods and facilitation techniques over a two-week period. The second workshop involved field General Directors, so it was not practical to travel to all the sites. The Ministry arranged for them to attend preparatory sessions in Amman before the workshop. To strengthen further the skills of the facilitators, after initial presentations by the workshop director, they took over in managing these sessions. Five of these sessions were held, so every facilitator had an opportunity to practice delivering part of a mini-workshop.

As part of their training, facilitators also compiled the personal aims and success criteria for the workshop from input by the participants. They reviewed the previous workshop to identify areas for improvement and devised a different approach to reporting to encourage concentrating on presenting individual ideas in general session, instead of just writing rewriting the brainstorm. They also devised the team compositions, balancing regional representation.

Because the second workshop involved four teams, coordination among teams became more important. Four facilitators were chosen to work with teams, and three were chosen to float among the teams, with special technical assignments (ICT, Training, Overall Design and Timing). All who participated in the training acquired skills that can be useful to their professional careers, and to the ICT Education Team.

The pre workshop meetings consisted of allowing participants to experience the same methods and techniques participants would use in the workshop itself. In addition to the content side of the workshop, trainees were exposed to the logistics of organizing an interactive workshop: working with the AMIR project, they saw the importance of attention to many, many details to make participants work easier: hotel arrangements, food, room layout, folders to hold information about the workshop, supplies to allow active discussions while still capturing ideas. Flip charts, markers, half sheets of paper and tape, were purchased in quantity to facilitate the process.

Trainees also brought their knowledge of the subject area of education, ICT, of participants themselves, of the Jordanian context, as well as their experience with previous workshops or conferences. Not all who participated in the training facilitated a team directly, but their input was useful to the process. Many people are needed on and off stage to conduct a successful workshop, especially one with active participation. The training emphasized that for a facilitation team to be successful, everyone must fully feel they serve as a model for the whole team.

The output of this facilitation training included brainstorms on purposes of the workshop, as well as an inventory of the facilitation trainees and the skills they brought to the team. Based on years of experience in this field, the Coverdale Organization drafted a workshop schedule using inputs from interviews with key stakeholders, as well as the facilitation training output. Top Ministry management then reviewed a selection of tasks to produce a flexible agenda for the workshop, revised daily with their input.

In a workshop without a strong teambuilding purpose, organizers can set an agenda of their own choice and essentially force participants to comply with it. In the light of the Ministry's purposes of building a team, and its highly skilled participants, this approach, known as traffic cop facilitation, would have been inappropriate. To ensure willing participation and cooperation, participants had direct input to the agenda during preworkshop interviews as well as during the workshop itself, where their comments shaped the agenda as well as the tasks.

#### Flow of the Workshop

Theme	Time	Tasks	
Team building, sharing	Thursday, morning	Personal Aims and Criteria	
information	and afternoon	Characteristics of an Effective Team	
		Task 1 Preparing to work together	
		Task 2: Priorities	
		Task 3: Resources Opportunities and	
		Constraints: 2002	
Developing a shared	Friday morning	Task 4: Action task lessons learned	
vision of the future		Task 5: Why introduce ICT in Education?	
		Task 6: How introduce ICT in Education?	
Action planning	Friday afternoon	Task 7: Action plans	
	and Saturday,	Task 8: Communication strategy	
	morning and		
	afternoon		

#### **Preparing to Work Together**

In the opening session, participants introduced each other using a carefully timed format designed to apply the principles of time management from the very beginning. After reviewing overall workshop purposes, and participants identified their personal aims for the workshop:

## **Personal Aims**

- Make a gradual use of technology according to specific phases with a time limit.
- Develop my skills in using the means of communication and technology.
- Speak in a common language about the concept of educational technology.
- Contribute in the development of the attitudes of the personnel working in the field of education towards information technology.
- Participate in developing a plan for the eradication of computer illiteracy among students, teachers and administrators.
- Transfer the innovations in ICT to the others.
- Meet the experts and other participants in the workshop and to interact with them to gain knowledge.
- Make a follow up of what is new in ICT to attain more knowledge.
- Allow people working in education to acquire the skills of using ICT.
- Introduce the importance of ICT to the people involved in education (students, teachers, directors, etc...)
- Shift this generation from teaching human sciences by a method of using modern technology.
- Be convinced about the necessity of applying ICT in the various fields of education.
- Discuss the preparations of the infrastructure (material and human resources) for the use of ICT.
- Think in anew objective and experimental way to spread the ICT project.
- Work on the provision of operational labs acceptable for students.
- Connect the schools with the labs at the directorates in a short period of time.
- Get acquainted with the external and internal experience on connecting the theory and application together in the field of ICT in education.
- Acquire training skills in order to train other related groups on ICT.
- Provide a suitable environment for the success of any workshop.
- Inform the students about the level of technology in the developed countries.
- Study the best ways of employing technology in management.
- Refresh previous information
- Learn the ideas of other participants about this project.
- Use the Internet for obtaining information.
- Establish an associated general mechanism for communication and cooperation between educational institutions in Jordan.
- Develop a national plan to enlarge the role of the local community in the process of communication and cooperation by including them in the educational communication net.
- Establish definite mechanism to identify the ways to transfer ICT to the field (schools and directorates)
- Employ what I learn from this workshop in my practical life.

## Criteria

#### **Immediate Criteria**

- Applicability of plans
- Defining the difficulties on the field and finding new methods to tackle them
- Each participant should realize the importance of his role
- Realization of the common vision
- Participants' zeal and self motivation to carry on the project
- Generation of new convictions
- Interaction and participation
- Participants satisfaction with the workshop
- Formation of participants conviction of the importance of technology in education
- Give way for introducing ICT equipment within the Directorate either by the Ministry or by the Directorate
- Extent of cooperation between participants
- If a decision has been made to oblige all participants to acquire computer and internet skills
- Introduction of time factor on the suggested plan as a time criteria to carry on Procedures
- Full commitment to the workshop timing and good use of the time
- Continuos follow up and problem solving
- Conducting similar workshops in the directorates to change directions
- Program continuity
- The extent to which plans can be applied
- Plans reflection on the field
- Implementation of agreed upon ideas
- Overcome fears of using technology
- Plans are applicable
- Keep up with the innovations on ICT field
- Participants commitment to what has been agreed upon
- Continuity of communication and information interchange between participants
- Employees enrollment in courses for ICT in education
- Both teacher and head master are using ICT easily and out of conviction
- Building of ICT application models (around 4 schools) then use them as an example for other schools.

Members of the ICT team then practiced written brainstorming, a key workshop tool, where they identified the characteristics of an effective team. In the first application, they used half-sheets of paper to capture a wide variety of ideas quickly.

## **Characteristics of the Effective Team**

- Respect of others' opinions
- Accepting ideas from other members
- Respect of others
- Mutual respect
- Cooperation
- Team work
- Common culture among the team members
- Continuous coordination among the team members
- Clarity of objective for the team members
- Cultural cooperation
- Time management
- Respect of the team members' opinions
- Effective communication
- Clear objectives for the members
- Integral and complementary cooperation
- Cooperation as a slogan
- Harmony and mutual understanding
- Harmony among the members
- Knowledge of modern technology
- Cooperation among members
- Homogeneous characteristics of the members
- Harmonious ideas
- Desire to work
- Mental harmony
- Clear objectives
- Strong faith in the subject-matter
- Willingness and eagerness for work
- Educated members
- Development and coping with new challenges
- Democratic team
- Aware of surrounding events to keep others informed thereof
- Homogenous characteristics

Following this application, participants moved to their teams. To ensure all participants the opportunity to work with

- General Director Abdul Kareem Azzam
- General Director Hisham Al Atrash
- General Director Mohamed Rashed
- Professor Ahmed Hyasat (for action planning only)
- Professor Talal Al-Zu'bi (for action planning only)

They rotated among the teams during the sessions. Teams prepared to work together using methods introduced to facilitate teamwork in the breakout sessions, including roles in a team and review.

In any team people can take responsibility for helping each other move forward by assuming certain roles that facilitate the process of working together. During Coverdale workshops we frequently ask participants to prepare to work together by identifying the roles they will play and the methods they will use to reach agreement. Based on its experience conducting participatory workshops, the Coverdale Organization has seen that every team appears to function better (at brainstorming and other tasks) when the following general roles are filled:

- Internal facilitator to facilitate discussion
- Chart manager to handle putting up the half sheets and collecting them for transcription
- Reporter to make the 3 minute report in general session
- Time keeper to help the team manage time
- Transcriber to transcribe the half sheets
- Participant(s) to plan the action, carry out the task and review it afterwards
- Observer(s) to help the team improve

Of course, everyone is a participant and anyone can observe. Acknowledging these roles recognizes that we all play multiple roles within any team. Knowing in advance what is expected of you allows you to contribute more fully. Leadership can emerge within this framework at any level, according to skills, according to knowledge, according to authority and according to circumstances.

In addition, the program provided the following roles to each team:

- External facilitator, to present tasks, clarify method and facilitate the process
- Floating facilitators to coordinate across teams and provide input to the design and planning process as requested.

Each group elaborated its own methods of working together and reviewed their own actions to learn from their successes and develop appropriate solutions to any difficulties.

Teams conducted reviews using a specific review method and compared results in general session, strengthening their skills at observation and listening in order to learn

from each other. At the end of each task, participants noted lessons learned and areas for improvement.

## **Nature of this Report**

A report of this kind primarily documents the outputs of the working groups along with the presentations made in general session. We hope it also captures the participatory approach, the enthusiastic exchange of information, and the spirit of listening and mutual respect generated in the workshop itself.

Transcripts of the sessions follow, in the words of participants, respecting their input and supporting their efforts.



## Task No. (1) Characteristics of the Effective Team

- Respect of others' opinions
- Accepting ideas from other members
- Respect of Others
- Mutual Respect
- Cooperation
- Team work
- Common culture among the team members
- Continuous coordination among the team members
- Clarity of objective for the team members
- Cultural cooperation
- Time management
- Contemplating (think deeply)
- Serious Performance
- Prompt achievement
- Knowledge of modern technology
- Team work spirit
- Integrated
- Enthusiastic
- Work in harmony
- Respect time
- Specify objective
- Respect others' opinions
- Document work results
- Consultation and deliberation
- Set a specific objective

- Respect of the team members' opinions
- Effective Communication
- Clear Objectives for the members
- Integral and complementary cooperation
- Cooperation as a slogan
- Harmony and mutual understanding
- Harmony among the members
- Knowledge of modern technology
- Cooperation among members
- Homogeneous characteristics of the members
- Harmonious ideas
- Desire to work
- Mental harmony
- Clear objectives
- Strong faith in the subject-matter
- Willingness and eagerness for work
- Educated members
- Development and coping with new challenges
- Democratic team
- Aware of surrounding events to keep others informed thereof
- Homogenous characteristics

## Task (2) Priorities Blue Team

## **Priority**

• Create a conviction at the community about the importance of education and information technology

## **Steps**

- Organize workshops to highlight the importance
- Conduct comparative studies on education with and without technology and circulating their results
- Organize audio, and visual mass media and press seminars on the importance of education technology

## **Priority**

Provide necessary training for professionals

## **Steps**

- Conduct comparative studies on education with and without technology and disseminating the results
- Organize seminars on the importance of Education Technology using audio-visual mass media and the press
- Assign teachers specialized in ICT whenever possible
- Train teachers to use computers
- Train teachers in advanced courses to employ computers in education
- Provide necessary funding for training
- Recruit competent trainers

#### **Priority**

• Provide ICT programs incorporated in teaching subjects

#### **Steps**

- Analyze curricula and programming materials
- Provide ICT centers
- Facilitate program exchange among education resources

## **Priority**

• Train those working at the ICT centers

- Define the training priorities
- Allocate the training centers
- Define the targeted group
- Provide appliances
- Implement training



• Transfer know-how to the new generation through the educational institution

#### **Steps**

- Provide computers for all students
- Assign technology as one subject to be mastered sit for the general examination

## **Priority**

• Provide the infrastructure

#### **Steps**

- Provide the necessary allocations
- Assign the executive professionals
- Follow up to assure performance quality
- Monitor achievements

## **Priority**

• Provide the necessary hardware

#### **Steps**

- Select up-to-date equipment
- Provide maintenance for the equipment
- Select adequate equipment
- Provide the infrastructure needed for the equipment

#### **Priority**

• Provide a computer lab at each school

## **Steps**

- Provide a class room of 48m space at each school
- Remodel electrical fixtures
- Provide relevant desks for computer sets
- Paint the room
- Provide curtains

#### **Priority**

• Provide the professionals for ICT

- Organize a seminar on the use of ICT applications
- Form working teams for training
- Define a training program
- Implement the training program
- Evaluate the training program
- Cooperation with universities

 Increase the level of performance for the professionals to have knowledge in technology

## **Steps**

- Provide training
- Organize courses to keep abreast with new changes
- Expand the computer labs
- Incorporate technology into curricula
- Have technology as one of the education outcomes

## **Priority**

• Provide the professionals as necessary

## **Steps**

- Recruit teachers as necessary
- Recruit maintenance technicians
- Train teachers

#### **Priority**

Provide skilled professionals

## Steps

- Announce the need and defining the required numbers
- Interview for prospective candidates
- Nominate them for appointment
- Appointment upon written resolutions
- Training

#### **Priority**

• Prepare qualified professionals

#### **Steps**

- Select the groups with their main desire directed to work
- Have them join training courses
- Have them know of the up-to-date changes
- Provide them with relevant sets
- Give them continuous incentives

#### **Priority**

• Provide the infrastructure including equipment, communication means and Provide the professionals to do the work

- Use mass media materials to raise awareness of the importance of Information and Communication Technology
- Create incentives

• Provision of specialized professionals

- Mobilizing the necessary professionals
- Provide training
- Enforce the roles of these professionals

# Task (2) Priorities Green Team

## **Priority**

• Provide training (orientation) for the staff

## **Steps**

- Train central team
- Employ specialized personnel
- Train core teams (directorates)
- Field training

## **Priority**

• Set a comprehensive plan for awareness programs

## **Steps**

- Define the target groups
- Nominate those who can implement awareness tasks
- Define the necessary inputs and discussion venues
- Implement awareness tasks as scheduled
- Evaluate of task implementation

#### **Priority**

 Orient educational professionals to accept the idea and create positive attitudes thereto

#### **Steps**

- Use seminars/workshops instead of lectures
- Organize workshops for school principals
- Organize workshops for school teachers
- Promote the idea through TV and Radio programs

#### **Priority**

• Increase awareness of those working at the Ministry of Education with regard to the importance of employing ICT in education and administration

- Disseminate this through meetings.
- Highlight the importance through leaflets
- Organize workshops to highlight the importance of ICT application
- Request the concerned personnel members to write reports and do research to highlight ICT importance



• Prepare the infrastructure

#### **Steps**

- Specify the schools
- Specify the needs of each school
- Provide electrical fixtures for the computer rooms in coordination with the Ministry

#### **Priority**

• Train those concerned with the ICT application

## **Steps**

- Define the target groups
- Define names of trainees
- Set and prepare the inputs necessary and define the training venue
- Implement the training
- Evaluate the training

## **Priority**

• Prepare the infrastructure

## **Steps**

- Raise funds
- Set plans and priorities for expansion (buildings)
- Install electrical fixtures

## **Priority**

 Provide sound orientation of teaching professionals with regard to the use of Information and Communication Technology

- Demonstrate main ideas in the program targeting school principals
- Organize workshops for teachers on the same topic
- Provide practical computer training targeting all the administrative professionals
- Implement some programs at specific schools and involve teachers therein
- Set adequate incentives for successful implementation

• Provide computers and orient the specialized professionals

## **Steps**

- Coordinate with the ministry after defining the needs
- Coordination possibilities among the directorate, the ministry and schools
- Provide adequate maintenance
- Promote the practice of maintaining public property
- Raise awareness and remove impediments
- Implement general knowledge for students and schools

## **Priority**

Provide financing

#### **Steps**

- Define the financing resources
- Set the implementation time according to the financial allocations

## **Priority**

• Define the numbers and setting priorities for training purposes

## **Steps**

- Raise awareness with regard to the importance of the communication network
- Classifying the concerned professionals into groups
- Set the equipment and starting with training
- Select a group of teachers to be locally trained.
- Make gradual shifting to the field

## **Priority**

 Employ technology in administrative data management to make sound and prompt decisions

#### **Steps**

- Conduct job analysis
- Train the administrative professionals to use the computer
- Provide computers sets for the concerned people
- Employ computers for the administrative work
- Continue updating of administrative data

#### **Priority**

• Train those working at the directorate and schools

- Disseminate computer awareness
- Introduce the equipment and define the target groups
- Explain how to use the computer
- Maintaining the sets
- Explain how to do simple repairs for computers

• Train the workers to use ICT in education and administration

## **Steps**

- Define the target group to be trained
- Assign the training centers
- Select highly qualified trainers
- Set financial and moral incentives for trainees
- Facilitate the acquiring of a PC for each personnel member at the Ministry of Education

#### **Priority**

 Apply technology to the teaching / learning process both at the computer lab and / or classrooms

#### **Steps**

- Train teachers to use computers in teaching
- Train teachers to develop lessons that can employ computers in certain activities
- Provide computers at schools at the computer labs and/or classrooms according to the government and people's capabilities
- Use computers in classroom settings by both teachers and students.

## **Priority**

• Involve students to accept the idea

- Promote of the idea by teachers
- Partial training to use the computers
- Expand channels of communication for students
- Provide motivating awards
- Apply

## Task (2) Priorities Red Team

## **Priority**

Overcome weaknesses in many of educational areas

## **Steps**

• Provide horizontal and vertical connectivity of secondary schools to the internet

## **Priority**

• Improve knowledge transfer

## **Steps**

- Define the required type, size and level of knowledge
- Program this knowledge in its various branches
- Connect computers with the several communication networks
- Keep abreast with the knowledge system and absorb it well
- Evaluate the already acquired knowledge



## **Priority**

• Improve the quality of teaching/learning and facilitate it

#### **Steps**

- Master computer skills
- Clarify the required tools and facilities
- Provide sound systematic orientation in harmony with the stage and age
- Apply skills by both learners and teachers
- Expand knowledge range through programs and the communication network

#### Priority

• Prepare the infrastructure and provide the required space for computers

#### Steps

- Provide the existing school buildings with computer labs
- Set a plan to do without rented school buildings
- Consent on building complex schools
- Cease the two-shift rotational system at schools
- Implement the required infrastructure works

#### **Priority**

• Form deeply rooted convictions about the importance of technology for all parties concerned with the teaching/learning process

#### **Steps**

- Organize gatherings and seminars with teachers and students
- Train the concerned on basic computer skills
- Promote the ownership of PCs
- Disseminate awareness at the local communities
- Produce computerized educational programs to consecrate convictions

## **Priority**

• Keep pace with developments and modern trends

## **Steps**

- Benefit from others' experiences
- Gradual transfer of technology
- Provide an adequate infrastructure
- Provide skilled manpower for maintenance and follow up
- Start training the working professionals

## **Priority**

• Train human resources both at the directorate and in the field

## Steps

- Define short and long term objectives
- Set a timetable
- Select trainers
- Provide computer labs
- Conduct practical application

#### **Priority**

• Computerize sections of the directorate

#### **Steps**

- Provide trained professionals
- Provide the required materials including sets and diskettes
- Provide a description of the sections' tasks
- Enter data on diskettes to get rid of paper files

#### **Priority**

Disseminate educational awareness in relation with computer use

- Select employees who are capable of disseminating computer education
- Organize seminars on computer use
- Highlight the computer benefits (for all)
- Encourage teachers to buy computers
- Assist in organize computer courses

• Train the teaching staff to use computers

## **Steps**

- Define numbers of teachers to be trained
- Provide trainers for them
- Provide equipment for training
- Provide training venues

## **Priority**

 Provide an adequate computer lab at schools where computer education will be provided next year

## **Steps**

- Define the number of schools which do not have adequate rooms
- Provide the required finances for buildings / maintenance
- Proceed with the building / maintenance tenders
- Deliver the venues after being built and maintained
- Provide the required infrastructure for computers' accommodation

## **Priority**

Assign a computer teacher at each school starting the next scholastic year

## **Steps**

- Define the required computer teachers at the several sites
- Establish the technical shortages
- Assign part-time professionals
- Assign the specialized people at the schools in need for computer professionals
- Organizing an intensive training course before starting with teaching

#### **Priority**

 Furnish schools with enough computer sets and connect them to an intranet and to resource centers

- Define schools that can be provided with computer sets
- Introduce requested modifications to accommodate the computer labs
- Assign and identify teachers for the computer labs
- Have the computer teachers train other teachers to use computers after being furnished and equipped (training courses at the same school)
- Change teachers' convictions and establishing new convictions on computers in education
- Organize workshops for teachers to highlight the importance of computer use
- Introduce other developing countries experiences on computers use in education

# Task (2) Priorities Yellow Team

#### **Priorities**

• Train the directorate's staff to use computers

## **Steps**

- Provide the directorate with computers
- Assign specialized employees at the directorates/programmer and engineer
- Establish the needs of employees for training as required
- Have them apply their training at their work sites
- Provide a set at each section as needed and according to the importance of applications



## **Priority**

• Provide schools operating at the center of the directorate with computer sets

## **Steps**

- Identify the required number of computers
- Provide the school with power supply
- Provide the required fixtures according to the necessary distribution
- Provide curtains and floor coverage
- Provide schools with well-trained teachers

## **Priority**

• Prepare the infrastructure needed for the use of Information Technology

#### **Steps**

- Define the concerned schools and list them on the available projects
- Provide electrical fixtures and curtains
- Provide the infrastructure for resource centers
- Train the largest number possible at schools
- Provide the required human power

#### **Priority**

• Teach by computers

#### Stens

- Identify the objective of using computers in this field
- Train teachers and students to use computers
- Train on data entry
- Train teachers to teach ICT
- Solicit feed back from students

## **Priority**

• Introduce computers in education

## **Steps**

- Raise awareness of the importance of computers
- Organize training courses for teachers
- Provide computers at schools
- Assign scores (school grades) for the computer subject

## **Priority**

• Determine the role of ICT in the teaching/learning process?

## **Steps**

- Organize a workshop to highlight this role
- Listen to other participants' opinions
- Introduce and summarize ideas
- Disseminate the workshop results in the field

## **Priority**

• Understand the Internet facts and aspirations

## **Steps**

- Prepare the community for this technological revolution
- Explain the benefit of using the Internet
- Train on Internet use
- Train on e-mail use
- Facilitate work using the Internet

## **Priority**

• Computerize management

## **Steps**

- Train employees on computer use
- Provide computers at the directorate
- Convince those at the directorate about the importance of computers
- Provide technicians to maintain computers

## **Priority**

• Provide the infrastructure for computers

## **Steps**

- Establish the needed space for rooms
- Implement plans
- Assure performance quality
- Receive and installing the equipment
- Operate the equipment to assure sound connectivity

## **Priority**

• Introduce this technology to students

## **Steps**

- Highlight the importance of computers
- Clarify the fact that our age is the age of development and technological advancement
- Make use of school broadcast and other media
- Highlight the aspired benefit (financial return)

## **Priority**

• Train teachers to use the university computers

## **Steps**

- Define schools which have computer labs
- Define the number of teachers who are subject to training
- Provide trainers
- Provide computers for training
- Set training plan to be immediately implemented

## **Priority**

 Raise awareness of school principals with regard to the importance of education technology

## **Steps**

- Define and prepare the areas that directors must be aware of
- Define the date, timing and venue
- Prepare the display sets and assuring their sound operation
- Organize a meeting
- Evaluate the meeting by highlighting in writing the advantages and disadvantages of the meeting

## **Priority**

Have the Jordanian community accept ICT

#### **Steps**

- Hold seminars at public places and on public occasions
- Provide posters
- Cooperate with the Jordanian press to contribute to this role

- Cooperate with Radio Jordan and hosting the Ministry's senior staff to speak on TV interviews
- Organize educational TV program
- Cooperate with outside parties who have good knowledge to join the Ministry's efforts to highlight the positive impact of ICT

## **Priority**

• Establish and furnish the buildings for resource centers

## **Steps**

- Define the required allocations to establish 15 centers (half the number of directorates) in 2002/2003
- Design a model study in 2001
- Agree with the international parties on preparation programs
- Set an adequate program for staff training at those centers
- Operate the centers

## **Priority**

 Prepare the required human resources including teachers and school principals to accommodate ICT

## **Steps**

- Increase the motivation and desires of teachers and workers at schools for training on computers
- Provide teacher-trainers and cooperate with other neighboring companies
- Set an adequate training program for observing time
- Follow up the program evaluate it on a regular basis
- Provide incentives for creative people and employ them to carry out training

## Task No. (3) Resources, Opportunities and Constraints Blue Team

#### Resources

- Budget allocation from the Ministry
- School donations
- Maintenance designated for the directorate
- Budget
- Donations from other parties including institutions, companies and individuals
- Grants, donations and gifts
- Ministry
- Institutions
- Donations
- Local community
- Involving the teachers and community members
- Participation of all workers and specialists at schools in training at the available computer unit
- Approach (methodology)
- The ministry budget
- Soft loans
- Disseminate the ICT idea among schools operating under the directorate
- A common vision to circulate computer operation at all schools

## **Opportunities**

- Increase the training allocations
- Arab support
- International support from the advanced countries
- Soft loans from the World Bank
- Teachers can be involved in groups along specific intervals to fulfill the objective
- The community members provide the opportunity for donors to donate
- Create acceptance at schools and the surrounding environment for education technology
- Increase the donation rate
- Increase the share of the directorate from the school donations
- Community support and local institutions

- Lack of finances
- School buildings are inadequate
- Social dimension
- Lack of allocations other than donations
- The training budget is short and cannot cope with the objectives set in the plan

- The scarcity of donations and grants
- Setting a policy not to borrow money unless in case of high necessity
- The financial cost is too high
- The financial position is not up to the level of demand in the local community

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## **General Session Report**

#### Resources

- The Budget set by the Ministry of Education
- Grants
- Allocate a share for the Directorate of Education from the school donations to secure regular maintenance, training and procurement
- Increase the training budget for the directorates of education from the several financial resources including grants, donations and gifts from institutions, individuals and companies
- Increase the training budget from all sources train teachers and administrative staff
- Involve all workers at school and all specializations in computer training and have them divided into groups according to the number of available sets.
- Develop a common vision for ICT from the financial perspective

## **Opportunities**

- The possibility of the Ministry supporting the purchase of computers and training
- Cooperation with the local community and its institutions

- Lack of financing
- Poor cooperation with the local community
- Poor school donations
- Lack of budget allocations necessary to support ICT

## Task No. (3) Resources, Opportunities and Constraints Green Team

#### Resources

- Provide the directorate with technicians and programmers
- Finances and contribution of the State, the local community, the public institutions and foreign grants
- Train the technical professionals at the directorate
- Prepare the required technical staff
- Finance by the ministry
- Depend on the community in supporting schools by providing them with computers
- Finances to be given by the Ministry to the directorates to produce the infrastructure
- Specialized university graduates who studied technology courses
- International financing through several channels
- Computers to be provided by the Ministry to the Directorate

## **Opportunities**

- Exploiting time to implement projects
- Exploiting human resources including employees, local community members and public institutions
- Employ the vocational schools to prepare the infrastructure
- Schools are disseminated over a wide geographic area
- The infrastructure is ready and the Ministry must provide the computers
- Outreach of more than 50% of the directorate's school

- Gradual field implementation, the project must be extended along six years
- Limit the number of schools and students
- Limit the need of schools from computers
- Limit the directorates where computer skills will be taught
- Limit the need of the directorate for trainers and technicians
- The spatial framework experiment in 50% of schools
- Not including a vision for beyond 2001
- Lack of professionals of operators and maintenance engineers to maintain continuity of the program
- Scattered areas
- Allocate a certain geographic area or specific directorates
- Number of students at each classroom and the classroom capacity
- Priority is for secondary schools
- Scattered schools and lack of power supply in certain villages
- Employ the volunteers (skilled people) from the local community
- The directorate capacity depending on available expertise

## **General Session Report**

- Exploiting the human and financial resources available at the directorate
- Gradual computer teaching in the field and evaluating the work
- Discussions still ignore the evaluation element to secure sound progress of work
- Remove the psychological barrier when dealing with computer
- Gradual formation of technical professionals supervising the implementation of the project and selecting an adequate number of schools where the relevant potentials for an infrastructure are available
- Financial and human support must be provided by the State, institutions and local community and then exploiting their capabilities in preparing the infrastructure and training
- There must be gradual implementation to give way for feedback and evaluation for modification and development purposes
- Provide the financial support from the available resources and benefiting from the technical capacities at the Ministry, universities and companies
- Finances, training and competent professionals and conviction are the most important elements for a successful computerizing process

## Task No. (3) Resources, Opportunities and Constraints Red Team

#### Resources

- Available expertise
- Attract foreign expertise
- Benefit from the private sector companies in the area
- Other international parties
- Expertise available at the governmental and private universities
- Benefit from the trained professionals working at the directorate
- Expertise available at the Ministry
- Benefit from the expertise at the educational centers and internet cafes

## **Opportunities**

- Benefit from the local community (community centers)
- International grants and loans
- Setting the training component as a condition when inviting for bidding for communication equipment for the State
- International grants and loans (international parties) and cultural relations
- Take advantage of cultural agreements between Jordan and other countries to train professionals
- Create training groups within the directorate
- Private sector contribution
- The Central Government Budget

- Poor and short financial allocations in the budget
- Lack of financial incentives to mobilize trained professionals
- The private sector is still unaware of the importance of ICT in education
- Legislation is still undeveloped
- The poor budget of the Ministry
- Brain drain
- Unavailable specialties in the field of technology
- Lack of well-trained professionals
- Financial constraints

## **General Session Report**

#### Resources

- Human expertise including international and local at the level of the Ministry, the universities, the private sector, directorates and schools
- Benefit form the expertise at the Ministry of Education and at companies operating in the area

## **Opportunities**

- Cultural Exchange Programs
- Community centers in the training process
- The private sector companies
- Cultural centers and vocational institutions
- Take advantage of cultural exchange agreements to train the professionals

- Financial
- Legislative updates
- Brain drain
- Scarcity of financial incentives
- Raising awareness of change
- Poor planning
- Poor follow up and evaluation
- Lack of financial incentives to mobilize qualified human power

## Task No. (3) Yellow Team

#### Resources

- Budget
- Ministry of Education
- Private institutions
- International parties
- The directorate resources from donations ...etc
- Local community and national institutions
- School donations
- School cafeterias
- Local community
- Educational institutions in the private sector
- Financing by the Ministry
- Foreign grants and loans
- Defining the needs of directorates of computers
- The Ministry must assure directorates' benefit from all projects
- Organizing a donation campaign

## **Opportunities**

- The senior staff must be convinced with the idea and the program upon implementation
- Forming committees to clarify the idea at the local community
- Promoting the idea at schools
- Training support by the official and private universities
- Equipment and sets
- Providing buildings
- Providing equipment and sets
- Providing the qualified human cadres
- Providing the required budget
- Having the school building and its facilities ready to accommodate the equipment
- Students' willingness to interact with this improvement
- Asking for the help of the employees at the Buildings' Section to implement maintenance, fixtures and floors
- Training
- Buildings
- Mobilizing advocates from outside the Ministry to implement and support the idea of the program
- Forming committees to raise funds

- Lack of technical cadres
- Shortage of Resources

- Local community does not accept the idea of joining the fund raising campaigns
- Shortage of adequate financing (financial)
- Shortage of qualified human cadres
- Shortage of equipment and sets
- Lack of buildings

## **Difficulties**

- Vague task terminology
- Vague task objectives
- Vague concepts
- At the beginning of the session the required task was not clear
- Some of the required tasks are not scheduled in the working papers
- Certain terms need a lot of contemplation to be understood (opportunities)

#### **Successes**

- Prompt achievement
- Generating common ideas on the task
- Best management of time
- Team work
- Time observance
- Cooperation and work
- Harmony among the team members
- Similar and compliant ideas
- Task is done as scheduled
- Prompt agreement in opinion
- Several points of view
- Easy communication among the team members
- Time respect
- Team work spirit
- Opinion respect

#### General Session

#### Resources

- Budget
- Local community and its institutions/ companies and universities
- School donations
- International grants, donations and loans
- Ministry of Education
- Providing financing from the Ministry and the local community
- Private Sector and institutions of the Ministry of Education
- Providing the qualified human and school cadres
- Field visits and strict follow up
- Cooperating with the staff of the buildings' section to achieve the required task
- Assuring implementation of all requirements for the computer labs including fixtures, curtains and floors
- Providing the specialized human cadres through recruitment and training is a basic element for the project success

## **Opportunities**

- Training support from both the official and private universities
- Generating convictions of others in the program
- Providing trained human cadres
- Providing equipment and sets

## **Constraints**

- Clarifying concepts before starting work
- Providing the suitable building
- Specialized people abstain from working at the Ministry of Education facilities
- Shortage of financial resources
- Lack of sets

#### **Successes**

- Time respect
- Quick implementation
- Easy communication among the team members
- Cooperation and team work
- Common understanding
- Commitment to scheduled time
- Promote team work

## Task No. (4) Action Task Blue Team

## **Lessons Learned**

- Flexible forms to be adopted according to circumstances, changes and purposes
- The purpose of the meeting decides its form
- The purpose or the objective of the session decides its shape
- There must be more than one form for the same session
- The session organization is related to the target
- Easy mobility
- Easy communication
- Easy speech
- Easy communication
- Time saving
- Communication
- The purpose, the nature of the venue and the number of participants decide the form of the session
- The optimal use of the place according to the purpose and the number of people can take more than one form
- Working on having several forms for seating the participants. However, there must be a consensus on one design according to practical and realistic vindications.
   Forms must be regularly developed

Task No. (4) Action Task Green Team

## **Lessons Learned**

- Accuracy at work and using the available means and optimal use of the place to serve the task
- Easy mobility
- Optimal use of the space and resources
- Setting more than one design makes it possible for comparison
- The importance of planning to benefit from resources in an effective manner
- It is hard to agree on one principle
- Exchange of ideas and accepting constructive criticism
- Meaningful planning can serve more than one target

## Task No. (4) Action Task Red Team

## **Lessons Learned**

- Breaking routine and accepting changes
- Acquiring experience
- Introducing the experience at the field
- Making use of furniture
- Planning prior to implementation of tasks

## Task No. (4) Action Task Yellow Team

## **Lesson Learned**

- Specify locations to have better performance of roles
- More interaction among the team members
- Free thinking
- Working to have the best and prepare the adequate means
- Exploiting time
- Optimal use of the space to serve the participants
- Setting the best means for participants' seating
- Working on finding a relaxing atmosphere during the session
- Optimal use of the building including rooms and halls
- Setting several designs for the general sessions in harmony with the number of participants and space
- Providing psychological relaxation for the participants
- Good settings mean successful work
- Providing the participants with psychological relaxation

## Task No. (5) Why Introduce ICT in Jordan through Education?

## In order to

- Use computers in all our institutions
- Improve teaching/learning
- Accelerate implementation
- Have an idea about the surrounding changes and to keep pace with new trends as well as removing impediments as much as we could
- Exchange expertise to increase knowledge
- Have an idea about others' experience in the shortest time possible and for the least effort
- Keep pace with the development and science development
- Create unified technological concepts
- Reach the best means to implement plans set in this respect
- Keep pace with developed countries and have others respect us
- Have an idea about things around us
- Understand and know things happening around us in this world of speedy development
- Bridge the gap between us and the developed world and have information communication with the whole world
- Generate enthusiasm
- Build up a modern community
- Have new information in the shortest time possible.
- Make sound decisions and develop learning
- Build up a human network and an integrated technology
- Facilitate learning for students and have access to information improve the teaching outputs
- Be partners in responsibility for results of using this technology
- Keep pace with the development of cognitive explosion
- Improve the quality of teaching/learning
- Review others' experiences and assign responsibilities to implement our work promptly.

## **Because**

- Cooperation gives the best possible experience to achieve the task with better results
- The objectives are the same for all
- It is important in this era and it has entered in all walks of life

## Task No. (6) How to Introduce ICT in Jordan through Education ? Blue Team

## Infrastructure

- Provide effective and strict safety at computer labs
- Furnish centers of educational data transmission
- Provide air conditioning for the computer labs
- Furnish the centers of producing software packages
- Provide cable and wireless telecommunication means at schools in villages
- Provide communication lines
- Provide the necessary furniture pieces for the computer labs
- Furnish the computer labs

## Task No. (6) How to Introduce ICT in Jordan through Education? Green Team

## **Financial**

- Control expenditures
- Review customs legislation ruling the communication means
- Obtain donations from institutions and local community
- School donations
- Encourage cooperation among the learning resource centers
- Teach typing in schools
- Make use of school donations
- Urge the local community to support the experience
- Benefit from school incomes
- Provide some allocations from directorate incomes
- Communicate with the local community and the public institutions to have their financial support.
- Prioritize communication technology on the expenditure list
- Raise awareness of parents to accept the raise in school fees
- Create income generating projects (training the local community members for fees to be used in purchasing more PCs)
- Have students pay for a services allowance
- Use money coming from Zakat and donors
- Ask for contribution of parents according to their financial position
- Cooperate with the concerned companies
- Collect donations

## **General Session Report**

- Raise funds by means of local community donations
- Cooperate with the concerned companies
- Raise the amount of school donations in favor of the program
- Reduce governmental expenditure in favor of the program
- Benefit from the technical expertise to reduce expenses
- Have students pay for the services rendered to them
- Prioritize communication technology on the expenditure list
- Have students share their own PCs with their colleagues
- Create income generating projects to train the local community. The earned amounts from training are then to be used in purchasing computers
- Review the customs legislation in terms of communication means
- Allocate part of the TV fee on the electricity bill for computers
- Control expenses in all fields in favor of technology provision at schools
- Add the amount of one fils on each electricity bill in favor of computerizing schools
- Communication with the local community, institutions, and companies to collect financial donations
- Have government to find a way to impose a tax to provide computers for schools
- Raise the schools donations in favor of the project
- Create a partnership between the government and the local community (private sector). Enhanced and ensured
- Organize training courses at schools and mobilize their financial revenue to finance the computer activities
- Remember that an e-government with inadequate financial support will be a sure failure

## Task No. (6) How to Introduce ICT in Jordan through Education ? Red Team

#### **Technical**

- Regular supervision to secure sound implementation
- Follow up on the process and securing its availability
- Train the professionals
- Implement the assessment, evaluation and development process
- Conduct field follow up by the specialized technical teams at the directorate
- Hold complementary work among the directorates to train qualified professionals
- Cooperate with specialized institutions including universities and private institutions to serve the technology plan
- Recruit trainers capable of implementing training according to the plan
- Specify the objectives
- Provide local expertise through training programs
- Set a short and a long term plan (sound planning)
- Set a plan for professionals training
- Provide a sufficient number of experts and trainers
- Specify the targeted groups in accordance to priorities and in harmony with the set plan
- Provide rooms equipped with the training requirements
- Conduct field follow up of training according to prior plans
- Evaluate to establish strengths and weaknesses
- Provide the Ministry with ideas
- Cooperate with the specialized institutions both inside and outside the country

## Task No. (6) How to Introduce ICT in Jordan through Education ? Yellow Team

## Management

- Recruit specialized staff
- Exchange data
- Participate in the training sessions
- Exchange experience
- Develop Procedures
- Form joint committees
- Meet among directors at the neighboring directorates and with some of the administrative staff to work on achieving the objectives through detailed procedural plans
- Coordinate with the local community

## **General Session Report**

- Make use of neighboring training centers and of the local community
- Form joint committees between the neighboring directorates and the local community to promote and support the use of technology
- Exchange of experience among the neighboring directorates
- Provide PCs in correlation with numbers of students
- Train the professionals
- Qualify the person to do this task
- Make use of the financial potential available at the directorates
- Develop thinking, educational methods and getting rid of the past infeasible practices while observing the religious and national heritage

## Task No. (7) Blue Team

## Action Plan for ICT at your Directorate with Respect to Human Resources

## **Purposes**

- Ensure computer use at schools will start at the beginning of scholastic year
- Allow the directorate to define its needs of human cadres for each school
- Allow students to obtain information by themselves with no need for a teacher; a teacher becomes a facilitator
- Define the sufficient number of human cadres necessary for the implementation of the plan
- Make sure that teachers are informed of the objectives of ICT
- Obtain the necessary information as prompt as possible
- Encourage easy exchange of information among schools, directorates and the ministry
- Provide planning, implementation, and regular evaluation at the educational institutions
- Provide students with computer culture

#### **Results**

- Defining number of the needed human cadres
- Informing the ministry of these needs
- Defining training centers for professionals
- Defining number of trainees who will be responsible for training
- Defining the duration needed for implementing the training scheme
- Implementing the training scheme for the administrative and teaching staff
- Defining the equipment needed for the training scheme
- Forming follow up committees to implement the training scheme at the directorate in the field
- A recommendation to satisfy the financial needs for workers to guarantee their stability at work
- Seeking assistance to the greatest extent possible with distinguished students and volunteers in the local community for training purposes
- Students have computer literacy
- Assigning teachers, administration staff, engineers, programmers and trainers
- Sound planning by the Ministry and the directorates
- The need for human resources specified(addition)
- Assignment of teachers (addition)
- Implementation of the training plan (addition)
- Students that acquire computer knowledge (addition)
- Computer study is provided at all school starting the scholastic year (addition)

- September of each year
- No shortages
- No shortage at schools with regard to computers
- Teachers must know their job sites during the next two months
- Information must be up-to-date with easy access
- Teaching staff is complete at schools (A computer teacher at each school)
- Self teaching applied by students
- University qualified teachers have been assigned
- Teachers are aware of the Information Technology objectives
- Readiness of learning resources
- Programmed plans with monthly and annual accuracy
- Students easily use the sets
- Provide labs before the beginning of the next year in coordination with the Ministry
- Obtain computer driving license

## Task No. (7) Green Team

## Action Plan at your Directorate with Respect to Public Awareness

## **Purposes**

- Be familiar with computers and like to use them
- Allow individual to be aware of the importance of computers
- Make computers an integral part of the special and general knowledge of those who own them
- Encourage people to accept computers and consider them an important piece of their property
- Maintain the computer sets as they cost a fortune
- Create a full conviction for the public and students to take care of their computers and maintain them
- Get the student to deal carefully and attentively with computers
- Introduce the technology idea to all people so that they could feel involved in the project that must represent a national objective for them
- Allow those dealing with computers to believe in their importance and must consider them as part of their own property
- Allow students to appreciate the importance of computers

#### Results

- An increasing rate of all community members who are convinced with the project
- Students maintain their computer sets and property
- Upon their free will, the community members offer money and sets to schools
- Raising funds
- Willingness and desire to work with computers
- Full conviction with the importance of computers and keenness on maintaining them well
- Self support by the community
- Seriousness, hard work and creativity by students
- Dissemination of computers use for daily life
- The new world and the role of computers in the new life
- Regular maintenance for computers

- The number of computers purchased by parents
- Extension of the computer service without maintenance
- The number of sets that have been donated
- The number of people that have been provided with computers
- The amount of money donated by the community members
- The extent of local community response to the use of computers
- The extent to which computers are maintained
- Students' response to maintain computers
- The extent to which students master computer skills

What ?	When ?	Who?
Expand or increase awareness of ICT	Along the whole year (regular)	The Education Director in coordination with the concerned sections
Conduct training programs	During Summer, 2001 until the completion of the program	Training directorate at the Ministry in cooperation with the Directorate of Education and its cadres
Keep abreast with the developed countries' experience	Before and during the program	The Ministry/Public Relation Directorate
Implementing mutual visit program between the local community and the school	During implementation	The Education Directorate
Organize symposia and lectures for the educational and local community members	Starting Summer 2001, and on a regular basis	The Education Directorate
Develop relevant school curricula	• Starting the scholastic year 2001	The General Directorate of Curricula
Produce software programs	Before and during 2001	The General Directorate of Computer and IT
Incorporate computer awareness	Before and during implementation	Education Directorate

# Task No. (7) Red Team Action Plan for ICT at your Directorate in Respect to Infrastructure

## **Purposes**

- Furnish adequate halls to start with computer teaching
- Provide the halls with electrical fixtures, air conditioning, curtains, telephone and control unit
- Provide the rooms with equipment and install them upon their delivery according to an announced tender during June 2001
- Maintain the computer rooms in terms of painting and safety elements for windows and doors
- Pay visits to schools in order to select the best site of the hall. Visits must be implemented during March 2001
- Encourage the Director of Education to form a specialized team for this purpose
- Equip computer rooms at directorates which do not have resource centers (addition)
- Acquisite land to establish computer projects (addition)
- Establish of maintenance centers(addition)
- Construct of training centers(addition)

## **Results**

- Rooms have been provided and furnished with the civil and electrical engineering works
- Some sets have been delivered to certain directorates. They are stored to be used in due time
- Complete furnishing of computer halls at schools in order to start with trial operation

- Commitment to scheduled time
- Commitment to provide sets in correlation with the number of rooms and students
- Schools' willingness to assign specialized people to start operating the experiment
- Compliance of school labs with the international specifications (addition)

What ?	When ?	Who?
Identify schools that have such halls	• End of current school semester (2000/2001)	Ministry/Projects/Directorate/Buildings/
such hans	semester (2000/2001)	Information Technology
<ul> <li>Call for bids according to specification then to hand</li> </ul>	• End of second school semester (2000/2001)	Ministry/Projects/Directorate/Buildings/
over the site to contractor	semester (2000/2001)	Information Technology
• Coordinate with the	During the summer vacation till the end of	Directorate/Company/School  Drive in all/
concerned company to operate computers	August, 2001	Principal/ Computer teacher at school
Obtain land required for	• At the beginning of the	The General Directorate of Land and
the establishment of	project (addition)	Surveillance (addition)
computer labs complain	<ul> <li>During and after</li> </ul>	The General Directorate of Control
with international	implementation	in order to assure quality (addition)
standards (addition)	(addition)	

## Task No. (7) Yellow Team

## Action Plan for ICT at your Directorate with Respect to Financial Resources

## **Purposes**

- Define the number of sets
- Provide finances for the infrastructure
- Provide finances to purchase equipment
- Provide money for training
- Provide computers at schools
- Furnish the adequate room
- Provide necessary finances from loans and grants
- Allocate money to purchase spare parts and provide maintenance
- Define the number of sets required for each directorate

#### **Results**

- Finances from the Ministry
- School donations
- Money collected from school cafeterias, grants, internal and external donations
- Infrastructure build-up
- Schools and administrations with sets according to their needs
- Administrative and technical staff
- Necessary allowances
- Relevant rooms space available

#### Criteria

- Administrative cadres must be trained during the scholastic year
- Technical cadres must be trained during the summer vacation
- A computer for each student at the classroom
- The infrastructure must be according to international standards
- Finances must be available for each year of the plan as is the case with the scholastic year
- Sets must be available before the scholastic year start
- Increase motivation of students and teachers
- Set the time table to distribute the sets
- People accept the idea

## **Information**

- Contact supporting parties to purchase computers
- The Education directorates have no financial allocations to implement their activities according to their budgets
- There are no integrated computer labs at schools

What ?	When ?	Who ?
<ul> <li>Allocate necessary funds</li> <li>Start with the implementation of infrastructure at schools and directorates</li> <li>Start with furnishing labs with computers</li> <li>Start with training for administrative and teaching staff</li> <li>Provide budget allocations for the project</li> <li>Deliver computers at schools</li> <li>Provide computer teachers at schools with spare parts</li> </ul>	<ul> <li>Funds to be provided in Summer 2001</li> <li>The room is established before September 2001/2002</li> <li>Selecting the right time to implement the task</li> <li>Implementing the infrastructure (4-8,2001)</li> <li>Providing schools with computers (7-8) 2001</li> <li>Training the trainers 6/2001</li> <li>Training teachers and administrative staff 7,8/2001</li> <li>At the beginning of the</li> </ul>	<ul> <li>Implementing the infrastructure:         The General Directorate for Educational Technology and the Director General of Supplies and Procurement     </li> <li>Providing Computers:             General Directorate of Supplies and Procurement</li> <li>Allocating Funds:             Directorate of Planning Directorate of Planning Directorate of Financial Affairs</li> <li>Training the Trainers             General Directorate of Training + Directorates of Education</li> <li>Director of Education</li> <li>Director General of Technology</li> <li>Head of Technology Section</li> <li>Technician (Electric)</li> </ul>
<ul> <li>(addition)</li> <li>Specify private sector contributions (addition)</li> </ul>	project and on a regular basis (addition)	Planning, Education and Finance (addition)

## Task No. (8) Blue Team Communication Plan : Field with Respect to the Community

#### **Purposes**

- Raise the awareness of the concerned personnel members at the Directorate with regard to the importance of communication technology
- Raise the awareness of school principals with regard to the task
- Have teachers understand the importance of communication technology
- Introduce the communication technology to students
- Have the outstanding students raise awareness of their peers and to exchange positive experience among the different schools
- Make use of the experience of parents

#### Results

- The formation of a focal point at the Directorate that have a good knowledge of the purpose
- School principals understand the task
- Teachers have a good perception of their role
- The formation of positive attitudes
- Students are interested in using computers
- Transfer of good experience of the task
- Parents are involved in raising awareness
- Disseminate technology awareness among school students

- The degree of understanding the committee has about the task (during the summer vacation of 2001)
- All directors participate in the summer gatherings of 2001
- Number of teachers participating in the awareness during summer 2001
- Number of students who have been informed of the task 2001-2002
- Students who are capable of using computers
- Number of outstanding expertise at schools
- Further involvement by parents

What ?	When ?	Who?
Form a committee at the directorate headed by the Education Director to be in charge of awareness	• 2001 - 2002	Headquarters and field general directorates
Inform the committee of their mission statement		
Produce programs Have the committee hold meetings with directors in the field		
Have the committee organize     meetings with the computer     teachers at schools		
Form awareness committees at each school under the chairmanship of the School Principal		
Organize meetings by the school committee with students starting with the secondary stage		
Make use of outstanding students to raise awareness of children		
Exchange experience among the school committees to make use of their knowledge		
Define difficulties faced in the field to be settled		
Organize meetings between the committee and teachers' councils		

## **Task No. (8)**

#### Green Team

## **Communication Strategy: Government, Private Sector and Universities**

## **Purposes**

- Encourage information institutions to raise awareness of the public
- Encourage government to encourage the private sector to contribute to the communication development
- Provide financial support (financial + material support)
- Benefit from the academic and technical expertise at universities
- Secure technical expertise
- Cooperate more with the private sector
- Encourage the private sector to be involved in providing adequate training for trainers
- Develop the technical experience for training the staff members

#### **Results**

- Purchasing more computers
- Expanding the communication network among all sectors of the State
- Providing financial support to implement the proposed plans
- Mitigate the burden of the State
- Obtaining sets and labs (in donation framework)
- Providing technical experience
- Providing scientific and practical experience
- Increasing the technical expertise capable of leading the change
- Benefiting from the universities experience in training
- Providing financial and moral support by the private sector
- Designing a communication network to cover all governmental activities
- Obtaining computers to be provided in the field
- Providing trained man power without incurring more governmental expenditures

- Increase the number of provided computers
- The number of private contributions to developing the communication network
- Increase the number of companies involved in the communication network
- The number of institutions involved in developing the communication network
- The extent to which the private sector responds to supporting the computerization plan
- Increase the number of training courses implemented by the private sector and universities
- Diversify the training courses
- Provide governmental services by means of communication in the shortest time possible

- The extent of universities cooperation to offer the necessary experience
- Obtain a distinguished communication quality among the several governmental/private sectors
- Diversified courses and programs in computerization and communication networking organized by the universities and the institutions involved in the project

## Report

- The information network cannot operate by itself away from the human network
- Benefit from the university experiences
- The private sector and the governmental institutions have great potential that can be mobilized and employed for the success of the computerization project
- Communicate with the governmental and international parties as well as the private sector is a must for the success of the project
- A big deal of enthusiasm by the community members to use computers
- An e- government
- The importance of the communication network for both the public and the private sector
- The partnership between the public and private sectors in favor of the project

What ?	When ?	Who ?
Develop legislation	• 2001	The Parliament and the Government
Employ the mass media	At the commencement of the program and during implementation	The Ministry of Information and the private sector
Provide training and technical experience	At the commencement of the program and during implementation	Public and private universities and private institutions
Obtain financial support	Before and during implementation	• The budget, the private sector, grants and donations
Use distant learning	After the project completion	Public and private universities and the private institutions
Develop the e- government	After the project completion	Ministries and the private sector
Conduct retreats and seminars	During the project	Managers, specialized employees and the private sector

# Task No. (8) Red Team Communication Plan: Field with Respect to the Community

# **Purposes**

- Define the local community components
  - Parent Councils
  - Municipalities and Village Councils
  - Cultural Forums
  - Worship places
  - Voluntary Societies
- Develop understanding to the necessary communication means
- Define the ideas and problems to be proposed to the community
- Persist in holding such meetings (a follow up committee)

#### Results

- Involvement of the community members
- Exchange of opinions
- Common understanding of the subject
- Facilitation
- Provision of finances (addition)
- Computer labs are spread at all directorates (addition)

#### Criteria

- No disturbance during weekly classes
- Reviewing legislation in force in order to secure clear communication channels
- Define the required schedule for the plan of action
- Include most of the community classes
- Accept the idea with the conviction of all
- Set the adequate evaluation for each meeting or gathering
- Make use of the feedback

What ?	When ?	Who?
<ul> <li>Develop</li> <li>personal contacts</li> <li>Contacts with the administrative governor</li> <li>Questionnaire</li> <li>Education Superintendents</li> <li>Students/Parents' Councils</li> <li>Written correspondence</li> </ul>	During September and October	<ul> <li>Education Directorate with all its sections</li> <li>School Principals</li> </ul>
Make personal contacts by means of interviews, telephone calls, letters and meetings	Defining the adequate time table at the beginning of the first and second semesters and during the summer vacation	<ul> <li>The Education         Directorate with all its sections     </li> <li>School Principals</li> </ul>
Setting an organized plan of action published by the Information and Public Relations Section	Setting meeting dates and venues	<ul><li>The Education     Directorate</li><li>School Principals</li></ul>
Form a committee from the directorate and the local community to follow up according to a scheduled program	Along the scholastic year	The Directorate of Education and the local community members
Form a committee by the Education Directorate to visit schools		
Designate an (operation)     room at the resource centers     or at the directorate		
<ul> <li>Visit schools to select the proper room</li> <li>Qualify the infra-structure</li> </ul>		
Provide computers		

# Task No. (8) Yellow Team Communication Plan for International Agencies

# **Purposes**

- Coordinate with the international agencies with regard to technological developments
- Coordinate with international agencies to provide financial and technical support
- Conduct detailed Review of international agreements in Technology
- Identify countries that can be approached
- Explain our action plan to the international parties
- Explain our needs of training to the international party
- Define countries that can help us in the project
- Ask the international party to inform us of their achievements in technology
- Explain to the international party my needs for financial allowances
- Find a committed financing party
- Explain the plan of action of Jordan for future and the need for assistance from other countries
- Know our schools actual needs for computers
- Define countries and institutions that are willing to cooperate with us in the field of technology development
- Gather data about countries that can be approached

#### Results

- Support (local or international) to finance costs
- Organization that provide long term loans
- Contact countries that can provide assistance
- Requests defined to be submitted to these countries (financial and other needs)
- Support for long term maintenance equipment
- Visits exchange information
- Future plans for these countries to participate
- International conferences to obtain equipment with international standards
- A highly qualified maintenance team
- Equipment provided according to scale agreements
- Grants and loans for Jordan to implement the project
- A review of the size and amount of financial or technical support from donor countries
- Definition of the financial position starting with equipment procurement
- Documents, equipment's and sets available with regard to communicating with international institutions
- Financial allowances in the form of grants from international agencies

- Experience exchange in this field with countries through the cultural exchange agreements
- Define cost of securing those sets to schools
- Training for a group of the concerned people for training
- Financial supporters
- Grants from Arab and foreign countries
- Define the things that are required from these countries
- Contact with international parties

#### Criteria

- Supportive response by countries
- Achieve a good level of training
- Contact institutions and projects to know their response
- Contacts must be according to international agreements
- Expand cultural exchange
- Obtain loans or financial grants in the correct time
- Obtain loans form the Arab and foreign countries before September 2001
- Enter into agreements with Arab and foreign countries
- Availability of information about the recent developments in technology
- Provide enough financial allowances
- Involvement in plan setting and executing agreements
- Contact international institutions by the senior authorities at the Ministry and the government during the months between 5-9, 2001
- Review cultural exchange agreements in favor of technological cooperation before the end of 2001

What ?	When ?	Who ?
<ul> <li>Determine what equipment and information are made available</li> <li>Obtain international financial support</li> <li>Offer training programs for the professional staff</li> <li>Provide computers to the school</li> <li>Identify what we need to implement this project         <ul> <li>Funding sources</li> <li>infrastructure</li> </ul> </li> <li>Provide grants and loans</li> <li>Provide computers</li> <li>Provide expertise and holding courses</li> <li>Determine what capital is made available</li> <li>Approach international parties to investigate the possibility of providing financial support</li> </ul>	<ul> <li>Approaching the international agencies in April and May 2001</li> <li>Prompt access to international publications</li> <li>Prompt preparation of standards (specifications)</li> <li>Training must be completed within 6 months</li> <li>Visits must be exchanged during one year</li> <li>Sets must be provided prior to September, 2001</li> <li>Programs must be offered prior to August, 2001</li> <li>Official contacts must begin in May to September, 2001</li> <li>Cultural cooperation agreements must be reconsidered before the end of 2001</li> <li>Publications and changes in the technology domain must be exchanged on a regular basis</li> </ul>	<ul> <li>Director of Education</li> <li>The concerned division head</li> <li>School principal</li> </ul>
<ul> <li>Provide publications about the available sets and to see if they cope with the technological advancement</li> <li>Understand the equipment's specifications and checking their compliance with international specifications</li> <li>Make official contacts with international institutions to ask for the technical support</li> <li>Make official contacts with international agencies to provide financial support in the form of grants and donations</li> <li>Approach countries to have them amend the cultural exchange agreements</li> <li>Exchange publications and up-to-date information in the field of technology</li> </ul>		

What ?	When ?	Who ?
<ul> <li>Provide loans and finances</li> <li>Provide sets and man power</li> <li>Make official contacts with international agencies to provide financial and technical support</li> <li>Call on countries to amend the cultural exchange agreements</li> </ul>	<ul> <li>Training must be completed within six months</li> <li>Visits must be exchanged during this year</li> <li>Contact international agencies during April and May, 2001</li> <li>Reconsider international agreements before the end of 2001</li> </ul>	<ul> <li>D. G. of Cultural and International Relations</li> <li>D.G. of Planning</li> <li>School Principal</li> <li>Secretary of the National Committee of UNESCO, ISISCO, and ALECSO</li> <li>D.G. of Educational technology</li> </ul>

# General Session Report Yellow Team

### **Purposes**

- Set an action plan for the international agencies
- Explain to the concerned party the needs of the Ministry (financial, technical, and physical)
- Have an idea about the state of the art in technology
- Exchange experiences in the field of technology with the countries that sign cultural cooperation agreements
- Organize international conferences and symposia.
- Provide sets with international standards
- Provide maintenance teams with high technical capability
- Adding the item: Search for additional financial sources (addition)
- Urge private companies to offer computers (addition)
- Seek permanent funding sources (addition)
- Allocate a certain rate of banks' and private universities' profits to support the computer project (addition)
- Allocate part of the budget for the purposes of training and maintenance (addition)

#### Criteria

- Have financial, physical and technical support before the end of this year
- Provide the Ministry with monthly publications and magazines about the latest developments in technology
- Contacts must be made prior to the end of this year
- Reconsider agreements with the Arab and foreign countries before the end of September

#### **Results**

- Availability of documents, and technological equipments provided by the international agencies
- Availability of grants and soft loans from international agencies
- Enforce international agreements in the technology field
- Determine availability of grants and soft loans from international institutions
- Communicate with international countries
- Explain the plan of action
- Keep track of the developments in technology
- Obtain loans, grants and technical experience
- Define the countries with the physical or technical availability

# **Evaluation Summary**

The result of the written evaluation conducted at the end of this workshop are broken down as follows:

10	Excellent overall
21	Very good in general
5	Good in most respect
0	Disappointing in most respect
0	Poor overall

# **Lessons learned**

- Enhance understanding and cooperation between the participants
- Team work
- Brainstorming in different issues
- Organized method of planning
- Importance of human network
- Dealing with people from different backgrounds
- Strategic planning for communications and information technology
- Fundraising idea
- Time management
- Basic elements to implement IT plan
- Importance of ICT as part of the educational process
- Acquaintance with other filed directors
- Planning for group work
- Exchanging experiences with others
- Setting aims and goals
- Time limit

# **Participant List**

- Ahmed Al Hawamdeh
- Ahmed Al Shayyab
- Ahmed Al Khuli
- Ahmed Hyasat
- Baha El Din Tahboub
- Tawfiq Jaber
- Harb Hussein
- Husni Daoud
- Khaed Kilani
- Khaled Waqfi
- Khaed Shaheen
- Khaled Touqan
- Reem Badran
- Zaha El Din Obiedat
- Sulieman Al Friejat
- Suhail Shaheen
- Talal Al Zubi
- Aref Al Majali
- Atef Al Dwiekat
- Abdul Razaq Al Rabie
- Abdul Kareem Al Azzam
- Abdul Latif Abu Taha
- Abdul Majeed Abu Snobar
- Adnan Al Shaweesh
- Attieh Friej
- Ali Al Ayasrah
- Awad Najadat
- Ghazi Al Khresha
- Fawaz Bataineh
- Kifah Al Omari
- Mohamed Al Rjoub
- Mohamed Al Saiedeh
- Mohamed Al Ajlouni
- Mohamed Al Attieh
- Mohamed Khalil
- Mohamed Rashed
- Moahmoud Al Soliebi
- Mahmoud Doudin
- Mashhour Fallah
- Naser Obiedat
- Naief Al Omoush
- Nawaf Kokazah
- Hala Taher
- Hisham Al Attrash
- Yousef Al Habashneh

#### Teachers' / Students' Comments

# Teacher: Eva Karadsheh

# **Al-Khansa' Secondary School for Girls**

- 1. Are the individual differences among students observed in the General Secondary Examination?
- 2. What is the plan of the Ministry of Education to develop curricula and machines?

# Teacher: Amjad Abu Al-Haj

# **Madaba Secondary School for Boys**

- 1. What are the plans of the Ministry of Education to provide internet or intranet connectivity at schools?
- 2. What are the plans of the Ministry with regard to PCs for teachers?
- 3. Would there be curricula for the second secondary students?

#### Recommendations

- Connecting schools with internet or intranet
- Curricula must be developed in harmony with new changes
- The curricula must be flexible to accommodate new modifications
- Maintaining the PCs and upgrading them as necessary
- Increasing the efficiency of education computerizing at schools

#### **Vision of Teachers**

- Using CDs and educational software diskettes to illustrate the curricula (other than computers)
- Organizing courses and meetings among teachers
- Using the internet facility for data exchange among teachers
- Openness to foreign cultures

# Student: Sawsan Khalil Abu Nab

# Al-Khansa' Secondary School for Girls

- 1. Is there any increase in the number of PCs to cope with the number of students?
- 2. To what extent is the computer used at schools to complement the role of teachers in relaying information to students?

# Student: Obaida Abdul Razzaq Breizat

# Al-Khansa' Secondary School for Girls

- 1. Are there any plans to introduce the students with the IT courses at the university?
- 2. Is it possible to amend curricula in harmony with differences among students?

#### Student: Tareq Abu Sleih

# **Madaba Secondary School for Boys**

- 1. Does the Ministry prioritize education computerization?
- 2. The Ministry's Plans to computerize the secondary stage curricula

# **Student Soleiman Khaled Hamarneh**

- 1. Does the Ministry plan to instruct students on hardware topics to enable them to deal with computers?
- 2. Self maintenance by students